Seattle residents were shocked when they discovered how much two new bike lanes in the downtown core cost to build — about $12 million per mile. Were the new lanes gold-plated? In a city suffering constant disruptions by major construction projects and beset by routine gridlock, people are quick to judge transportation projects.

Can a $12 million-a-mile bike lane be justified, or is it as bad as it sounds?

**What’s in a Lane?**

They aren’t exactly gold-plated, but these bike lanes are not your parents’ bike lanes. Before 2010, the design guidelines that transportation engineers followed rarely included accommodations for cyclists. If they did, the bike lane was to be created by painting a stripe three feet inside the curb.

In the U.S., the theory of “vehicular cycling” dominated both cycling culture and urban design. Cyclists were supposed to bike like they were driving a car. They were told to take space in the car lane and cycle fast enough to keep up with motor vehicles. Most people are not capable of and often not interested in riding this way. In America, cycling became a niche activity. Meanwhile, people of all ages comfortably pedaled through European cities.

Then, in 2010, the National Association of City Transportation Officials (NACTO) began to study bike lane designs from around the world and across the United States to develop the Urban Bikeway Design Guide. They copied the success of bike-friendly cities like Copenhagen and Amsterdam.

The new guide called for protected bike lanes, dedicated light signals, and routing bike lanes behind bus stops.